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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/813,837

03/31/2004

Akhil K. Garlapati

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05/07/2007

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SUITE 350

AUSTIN, TX 78731

EXAMINER

PATEL, RAJNIKANT B

ART UNIT

PAPER NUMBER

2838

MAIL DATE

DELIVERY MODE

05/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/813,837

Applicant(s)

GARLAPATI ET AL.

Examiner

Rajnikant B. Patel

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,3,7-26,28-37 and 55-60 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,7-26,28-37 and 55-60 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Response to Arguments*

1. The finality of previous Office Action (dated 29 September 2006) on merits is hereby withdrawn. Any inconvenience to the applicant is regretted. A new Non- final Office Action is presented here below.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) The invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical

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Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 55-58 are rejected under 35 U.S.C. 102(b) as being anticipated by Nelson (U.S. Patent # 4,603,291).

Nelson discloses claimed subject matters an apparatus (figure 1-5), including a means for developing a current proportional to absolute temperature, means for amplifying, a resistor coupled to base of the bipolar transistor and to have different current densities, a parabolic function of temperature, a means for adjusting and two base-emitter voltage of bipolar transistor (column 1, line 30-65, column 3, line 20-65, column 4, line 35-69, column 6, line 5-30 and column 7, line 20-40).

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1,3,10-12,16-22 and 59-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mietus (U.S. Patent # 5,666,046) in combination with Nelson (U.S. Patent # 4,603,291).

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Mietus discloses claimed subject matters a voltage reference generator (figure 2), including a first bipolar transistor (figure 2, item 34), an amplifier (figure 2, item 32), a resistor coupled to the base of the first bipolar transistor (figure 2, item 46 and 43), the current is proportional to a voltage difference between two base-emitter voltages and bipolar transistors configured to have different density ((column 5, line 1-65), a feedback path, ca current mirror (column 8, line 35-50). However Mietus does not disclose the utilization of the technique for the current being proportional to an absolute temperature, a parabolic function of temperature. Nelson teaches the utilization of the similar technique for the current being proportional to an absolute temperature, a parabolic function of temperature (column 3, line 20-30 and column 4, line 35-69). It would have been obvious one having an ordinary skill in the art at the time the invention made to modify Mietus's voltage reference circuit by utilizing the technique taught by Nelson for the purpose of supplying the first current which has the requisite temperature proportionality.

6. Claims 7-9,13-15 and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mietus (U.S. Patent # 5,666,046) in Combination with Nelson (U.S. Patent # 4,603,291).

Mietus disclose the claimed subject matters as explained above, except the utilization of the technique for a parabolic function, a low-beta transistor, beta-is less than ten, beta is less than five, a power supply is less than 1.7V, the power supply rejection ratio is at least 60db and voltage reference generator is less than the band-gap

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voltage of silicon. It would have been obvious one having an ordinary skill in the art at the time the invention was made to utilize transistor with available beta and power supply as well as absolute temperature function, since it has been held to be within the general skill of a worker in the art to select a known material or range on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshine 125 USPQ 416.

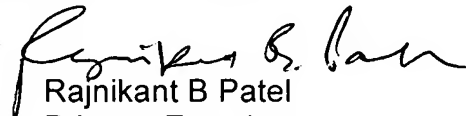
7. For method claims 26-30, note that under MPEP 21 12.02, the principles of inherency, if a prior art device, in its normal and usual operation, would necessarily perform the method claimed, then the method claimed will be considered to be anticipated by the prior art device. When the prior art device is the same as a device described in the specification for carrying out the claimed method, it can be assumed the device "1 inherently performs the claimed process. In re King, 801 F.2d 1324, 231 USPQ 136 (Fed Cir. 1986). Therefore the previous rejections based on the apparatus will not be repeated.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rajnikant B. Patel whose telephone number is 571-272-2082. The examiner can normally be reached on 6.30-5.00; m-f.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Rajnikant B Patel  
Primary Examiner  
Art Unit 2838

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